

O'Connell Law Office  
Application No. 10/810,245

**PATENT**  
File Reference: BOMDENUS

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Inventor(s):	BOWSHER, M. William	}	GAU:	3732
Serial No.:	10/810,245	}	Examiner:	Doan, Robyn Kieu
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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Applicant's Appeal Brief**

The Applicant most respectfully submits the present brief under 37 C.F.R. § 41.37 in support of his appeal of the rejection of each of the remaining claims in the above-referenced matter.

*I. Real party in interest.*

M. William Bowsher, an individual, is the real party in interest in this matter.

*II. Related appeals and interferences.*

There are no prior or pending appeals, judicial proceedings or interferences known to the appellant which may be related to, directly affect, or be directly affected by or have a bearing on the Board's decision in this appeal.

*III. Status of Claims.*

In brief summary, the present application was filed with 63 claims in total with claims 1 and 29 standing independently. Claims 24-28, 32, 35-45, and 54-58 have been withdrawn from consideration. Claims 1-3, 29-31, 33, 34, and 46-48 were previously canceled, and claims 64-68 have been added thereby leaving claims 4-23, 49-53, and 59-68 pending for consideration. Of the claims pending for consideration, claims 4, 7, 9, 11, 50, and 67 currently stand independently and claims 46-53 and 64-68 are allowed.

*IV. Status of Amendments.*

No amendments were filed after the final rejection of 01/09/2008. All amendments have been entered.

*V. Summary of claimed subject matter.*

Independent claims 4, 7, 9, 11, 50, and 67 are presented on appeal.

**Independent Claim 4**

Claim 4 seeks to protect a dental hygiene apparatus that comprises the following:

a dispensing member comprising an annular dispensing ring with an aperture for receiving a finger of a user;

[The dispensing member is first referenced in the detailed description on p. 15, line 13, and is indicated at 12 in, for example, each of FIGS. 1 and 2A, 2B, and 2C.]

an annular dispensing bobbin for retaining dental floss relative to the dispensing member wherein the dispensing bobbin is rotatably retained for substantially concentric rotation relative to the dispensing ring;

[The concentrically disposed dispensing bobbin is first referenced in the detailed description on p. 17, line 5, and is indicated at 38 in, for example, FIGS. 3C-E and G and 5G.]

an activating switch operably associated with the dispensing bobbin for selectively enabling a dispensing of dental floss from the dispensing member;

[The activating switch of the dispensing bobbin is first referenced in the detailed description on p. 16, line 1, and is indicated at 18 in, for example, FIG. 1 and FIGS. 2A-C.]

a means for preventing an accumulation of dental floss relative to the dispensing member including during a triggering of the activating switch comprising a means for ensuring unidirectional, dispensing rotation of the dispensing bobbin;

[The means for preventing an accumulation of dental floss relative to the dispensing member

is first referenced in the detailed description on p. 17, line 2, and is described as including any means for ensuring unidirectional rotation of the bobbin including a ratchet arrangement, a drag arrangement (p. 16, line 13). Ratchet arrangements are shown, for example, in FIGS. 3E-G and 5A-B.]

an accumulating member structurally separate from the dispensing member; and

[The accumulating member is first referenced in the detailed description on p. 15, line 13, and is indicated at 14 in, for example, each of FIGS. 1 and 2A, 2B, and 2C.]

a means for accumulating dental floss relative to the accumulating member;

[The means for accumulating dental floss relative to the accumulating member is shown as a bobbin 38 in, for example, FIGS. 3C and D and is first referenced in the detailed description on p. 17, line 5.]

whereby dental floss can be dispensed from the dispensing member and accumulated by the accumulating member.

### **Independent Claim 7**

Claim 7 is directed to a dental hygiene apparatus comprising:

a dispensing member comprising an annular dispensing ring with an aperture for receiving a finger of a user;

[The dispensing member is first referenced in the detailed description on p. 15, line 13, and is indicated at 12 in, for example, each of FIGS. 1 and 2A, 2B, and 2C.]

an annular dispensing bobbin for retaining dental floss relative to the dispensing member

wherein the dispensing bobbin is rotatably retained for substantially concentric rotation relative to the dispensing ring;

[The concentrically disposed dispensing bobbin is first referenced in the detailed description on p. 17, line 5, and is indicated at 38 in, for example, FIGS. 3C-E and G and 5G.]

an accumulating member structurally separate from the dispensing member comprising an accumulating ring with an aperture for receiving a finger of a user; and

[The accumulating member is first referenced in the detailed description on p. 15, line 13, and is indicated at 14 in, for example, each of FIGS. 1 and 2A, 2B, and 2C.]

an accumulating bobbin for accumulating dental floss relative to the accumulating member wherein the accumulating bobbin is rotatably retained for substantially concentric rotation relative to the accumulating ring;

[The accumulating bobbin 38 is shown in, for example, FIGS. 3C and D and is first referenced in the detailed description on p. 17, line 5.]

whereby dental floss can be dispensed from the dispensing member and accumulated by the accumulating member.

### **Independent Claim 9**

Claim 9 sets forth a dental hygiene apparatus that comprises:

a dispensing member comprising an annular dispensing ring with an aperture for receiving a finger of a user;

[The dispensing member is first referenced in the detailed description on p. 15, line 13, and is



indicated at 12 in, for example, each of FIGS. 1 and 2A, 2B, and 2C.]

an annular dispensing bobbin for retaining dental floss relative to the dispensing member wherein the dispensing bobbin is rotatably retained for substantially concentric rotation relative to the dispensing ring;

[The concentrically disposed dispensing bobbin is first referenced in the detailed description on p. 17, line 5, and is indicated at 38 in, for example, FIGS. 3C-E and G and 5G.]

an accumulating member structurally separate from the dispensing member;

[The accumulating member is first referenced in the detailed description on p. 15, line 13, and is indicated at 14 in, for example, each of FIGS. 1 and 2A, 2B, and 2C.]

a means for accumulating dental floss relative to the accumulating member;

[The means for accumulating dental floss relative to the accumulating member is shown as a bobbin 38 in, for example, FIGS. 3C and D and is first referenced in the detailed description on p. 17, line 5.]

an activating switch operably associated with the means for accumulating dental floss relative to the accumulating member for selectively enabling a retraction of dental floss relative to the accumulating member;

[The activating switch of the accumulating member is first referenced in the detailed description on p. 16, line 5, and is indicated at 20 in, for example, FIG. 1 and FIGS. 2A-C.]

a means for inducing an automatic accumulation of dental floss relative to the accumulating member during a triggering of the activating switch;

[The means for inducing an automatic accumulation of dental floss is described as

comprising a coil spring on page 17, line 9, and is referenced at 32 in, for example, FIG. 3B.]

whereby dental floss can be dispensed from the dispensing member and accumulated by the accumulating member.

### **Independent Claim 11**

Claim 11 is directed to a dental hygiene apparatus comprising:

a dispensing member;

[The dispensing member is first referenced in the detailed description on p. 15, line 13, and is indicated at 12 in, for example, each of FIGS. 1 and 2A, 2B, and 2C.]

a means for retaining dental floss relative to the dispensing member;

[The concentrically disposed dispensing bobbin, which acts as a means for retaining dental floss, is first referenced in the detailed description on p. 17, line 5, and is indicated at 38 in, for example, FIGS. 3C-E and G and 5G.]

an accumulating member structurally separate from the dispensing member; and

[The accumulating member is first referenced in the detailed description on p. 15, line 13, and is indicated at 14 in, for example, each of FIGS. 1 and 2A, 2B, and 2C.]

a means for accumulating dental floss relative to the accumulating member;

[The means for accumulating dental floss relative to the accumulating member is shown as a bobbin 38 in, for example, FIGS. 3C and D and is first referenced in the detailed description on p. 17, line 5.]

wherein the dispensing member and the accumulating member are color coded;

[Color coding is described in the paragraph beginning on p. 17, line 17.]

whereby dental floss can be dispensed from the dispensing member and accumulated by the accumulating member.

### **Independent Claim 50**

Independent claim 50 is directed to a dental hygiene apparatus comprising:

a floss retaining member comprising a first ring with an aperture for receiving a finger of a user and a means for retaining dental floss within the ring, a second ring with an aperture for receiving a finger of a user, and a means for retaining dental floss within the second ring whereby the floss retaining member comprises floss retaining knuckles; and

[Floss retaining knuckles with first and second rings with apertures in each and a means for retaining dental floss are shown in FIGS. 26A-C and 27A-C and are described beginning on p. 40, line 5.]

a means for enabling a transfer of dental floss relative to the floss retaining member.

[The means for enabling a transfer of dental floss relative to the floss retaining member is shown in FIGS. 26A-C and 27A-C and described beginning on p. 40, line 5, as including bobbins 38, 38A, and 38B and activating triggers 18, 18A, and 18B.]

### **Independent Claim 67**

Independent claim 67 is directed to a dental hygiene apparatus that comprises:

a dispensing member comprising an annular dispensing ring with an aperture for receiving a

finger of a user;

[The dispensing member is first referenced in the detailed description on p. 15, line 13, and is indicated at 12 in, for example, each of FIGS. 1 and 2A, 2B, and 2C.]

a dispensing bobbin for retaining dental floss relative to the dispensing member wherein the dispensing bobbin is rotatably retained for substantially concentric rotation relative to the dispensing member;

[The concentrically disposed dispensing bobbin is first referenced in the detailed description on p. 17, line 5, and is indicated at 38 in, for example, FIGS. 3C-E and G and 5G.]

an accumulating member structurally separate from the dispensing member wherein the accumulating member comprises an annular accumulating ring with an aperture for receiving a finger of a user;

[The accumulating member is first referenced in the detailed description on p. 15, line 13, and is indicated at 14 in, for example, each of FIGS. 1 and 2A, 2B, and 2C.]

an accumulating bobbin for accumulating dental floss relative to the accumulating member wherein the accumulating bobbin is rotatably retained for substantially concentric rotation relative to the accumulating member;

[The means for accumulating dental floss relative to the accumulating member is shown as a bobbin 38 in, for example, FIGS. 3C and D and is first referenced in the detailed description on p. 17, line 5.]

wherein the dispensing bobbin is enclosed within a housing of the dispensing member and wherein the accumulating bobbin is enclosed within a housing of the accumulating member;

[The “torroidal housing 15” is first described as retaining a “bobbin 38” on p. 17, line 6, and the accumulating and dispensing bobbins are shown as being within housings in, for example, FIGS. 3A-G, 4, 5A, 5B, 6B, and 6C.]

whereby dental floss can be dispensed from the dispensing member and accumulated by the accumulating member.

*VI. Grounds of rejection to be reviewed on appeal.*

- Whether claim 11 is anticipated by U.S. Patent No. 5,199,452 to Cheng.
- Whether claims 4 is obvious under 35 U.S.C § 103 based on Cheng, U.S. Patent No. 5,415,188 to Altshuler, and U.S. Patent No. 5,680,875 to Winters.
- Whether claims 7 and 67 are obvious based on Cheng in combination with Winters.
- Whether claims 9 is patentable over Cheng when combined with Winters and U.S. Patent Publication No. 2004/0163665 of Alvarez.

*VII. Argument.*

Claim 11 stands rejected as anticipated by U.S. Patent No. 5,199,452 to Cheng. Claims 4, 5, 6, and 64 are rejected as being obvious under 35 U.S.C § 103 over the combined references of Cheng, U.S. Patent No. 5,415,188 to Altshuler, and U.S. Patent No. 5,680,875 to Winters. Claims 7, 8, and 67 were said to be obvious based on Cheng in combination with Winters. Even further, claims 9, 10, 12-17, 22, 23, 65, and 68 were rejected as unpatentable over Cheng when combined with Winters and U.S. Patent Publication No. 2004/0163665 of Alvarez. Claims 18 and 66 were rejected as obvious in light of Cheng, Alvarez, Winters, and Altshuler. Claims 19-21 were rejected as obvious based on Cheng, Winters, and U.S. Patent No. 3,745,788 to Sullivan. Claims 49-53 and 59-63 are allowed. For the reasons discussed below, it is respectfully submitted that allowance of all pending claims is warranted.

**Cheng, Altshuler, and Winters Fail to Render the Dental Hygiene Apparatus of Independent Claim 4 Obvious**

The Applicant respectfully submits that independent claim 4 is not rendered obvious by U.S. Patent No. 5,199,452 to Cheng even when combined with U.S. Patent No. 5,415,188 to Altshuler and U.S. Patent No. 5,680,875 to Winters. Claim 4 requires, among other things, that the dispensing member comprise “an *annular dispensing ring* with an aperture for receiving a finger of a user” and that there be “an *annular dispensing bobbin* for retaining dental floss relative to the dispensing member wherein the dispensing bobbin is rotatably retained *for substantially concentric rotation* relative to the dispensing ring.” (Emphasis supplied).

Neither Cheng, Winters, Altshuler, nor any obvious combination or modification discloses an annular dispensing ring with a concentrically retained dispensing bobbin. As defined in The American Heritage® Dictionary of the English Language: Fourth Edition, a “ring” is “A circular object, form, line, or arrangement with a vacant circular center.” Cheng’s barrel-shaped housings do not comprise rings and, consequently, do not provide apertures for receiving a finger of a user as claim 4 demands. Cheng teaches that it is desirable to provide housings that can be retained in a user’s hand. To that end, Cheng provides “a pair of discrete housing configured to be held in opposite hands of a user.” Col. 1, lines 40-41. One skilled in the art would be taught away from providing a ring with an aperture for receiving a finger of a user *and an annular dispensing bobbin* retained for concentric rotation as Applicant’s claim 4 specifies.

In referencing Winters, the Office points to Figure 10 in support of the conclusion that the patent “discloses a flossing device wherein the floss spool is contained in a housing and includes a ring for receiving the finger of the user ...” Office Action, 01/09/2008, p. 3. However, Figure 10 and the textual description thereof in Winters discloses only a T-shaped “finger grip member 64” with an open “grip area 63” to each side thereof. Furthermore, the “spool dispenser 50” in Figures 6a, 6b, 7, 8a, and 8b does not have a concentrically disposed bobbin and, therefore, is missing an entire element claimed by the Applicant. No reasonable interpretation of Winters could be said to teach or render obvious an “annular ring” with a concentric “annular dispensing bobbin” as required by claim 4 since, by definition, an annular ring comprises a circular structure and since a concentric dispensing bobbin must be provided that is rotatable relative to the annular ring.

Here, finding the invention of claim 4 unpatentable would require more than a mere



combination of the teachings of prior art disclosures in an obvious manner. Instead, reading Winters to render Applicant's claimed structure obvious requires impermissibly adding teachings and structure to the prior art based on the Applicant's own invention. Using an invention as the blueprint for its own reconstruction represents improper hindsight reasoning. One "cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." *In re Fine*, 837 F.2d 1071, 1075 (Fed. Cir. 1988). Furthermore, to modify the structure of both Winters and Cheng to approximate Applicant's claimed invention, one would need to change the principle of operation of the Winters structure. As is well settled, where the principle of operation of a prior art arrangement must be changed to meet the claim limitations, "then the teachings of the references are not sufficient to render the claims *prima facie* obvious." MPEP 2143.01(VI). (citing *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)).

Of course, it is equally clear that Altshuler's wand-shaped housing would not teach one skilled in the art to provide the annular dispensing ring with a concentric annular bobbin disclosed and claimed by the Applicant.

In brief, nowhere in the cited art is there disclosed or rendered obvious a dental hygiene apparatus with an annular dispensing ring with a concentric annular dispensing bobbin together with an activating switch and a "a means for preventing an accumulation of dental floss relative to the dispensing member including during a triggering of the activating switch comprising a means for ensuring unidirectional, dispensing rotation of the dispensing bobbin". It is respectfully submitted, therefore, that no cited reference or obvious combination or modification thereof can properly support an anticipation or obviousness rejection of claim 4. Accordingly, the Office's

reconsideration and allowance of independent claim 4 and the claims that depend therefrom are respectfully requested.

**Independent Claim 7 is Not Rendered Obvious by Cheng in Combination with Winters**

Like claim 4, independent claim 7 demands an annular dispensing ring with a concentrically disposed annular bobbin. However, claim 7 enjoys added patentability in that it further requires an accumulating ring that also has a concentrically retained annular bobbin. Even where Winters teaches the use of a “spool dispenser 50”, Winters would guide one skilled in the art toward employing the “spool dispenser 50” in combination with a “take-up spool member 12” that essentially comprises a simple stick. Since he teaches using such disparate dispensing and accumulating structures, Winters would not teach or render obvious providing an annular dispensing ring with a concentric dispensing bobbin in combination with an annular accumulating ring with a concentric accumulating bobbin.

**Independent Claim 9 is Patentable Over Cheng, Winters, and U.S. Patent Publication No. 2004/0163665 of Alvarez**

Claim 9 again requires an annular dispensing ring and a concentric annular dispensing bobbin together with a structurally separate accumulating member such that it patentably defines over Cheng and Winters. However, claim 9 additionally requires an activating switch and a means, such as a coil spring, “for inducing an automatic accumulation of dental floss relative to the accumulating member during a triggering of the activating switch”. Since Cheng and Winters fail to

render obvious Applicant's claimed dispensing ring with a concentric annular dispensing bobbin, one skilled in the art would not find it obvious to provide such a structure having an accumulating member with a means for inducing an automatic accumulation of floss in response to a pressing of an activating switch.

**There is no Basis for the Rejection of the Color Coding Required by Independent Claim 11**

The dental hygiene apparatus of claim 11 is not taught or rendered obvious by even the combined prior art. Nowhere in the cited references is there disclosed or rendered obvious a dental hygiene apparatus with, among other things, a dispensing member and a structurally separate accumulating member that are color coded to enable a user to differentiate between the dispensing member holding clean floss and the accumulating member holding contaminated floss. Indeed, it appears that no support whatsoever has been provided for the Office's rejection of claim 11. Accordingly, the Applicant respectfully submits that there is no proper basis for rejecting claim 11.

**Independent claim 67 is Patentable Over Cheng Even When Combined with Winters**

Independent claim 67 is directed to a dental hygiene apparatus with an annular dispensing ring with a concentric dispensing bobbin and an accumulating ring with a concentric accumulating bobbin such that it is patentable for the reasons described above. However, claim 67 further specifies that the dispensing bobbin is enclosed within a housing of the dispensing member and that the accumulating bobbin is enclosed within a housing of the accumulating member. It is respectfully submitted that, when claim 67 is considered as a whole as it must be, that the provision of a

dispensing and accumulating rings, each with concentric bobbins disposed within dedicated housings, is still more clearly not taught or rendered obvious by even the combined and modified cited art.

### **Conclusion**

The cited art neither discloses nor renders the claimed invention obvious. Therefore, the Applicant most respectfully submits that the claims presented are patentable over the cited art. With this in mind, the Office's reconsideration and allowance of the specification and claims 4-23, 49-53, and 59-68 are respectfully requested.

(VIII) *Claims appendix.*

--1-3. (canceled)

4. A dental hygiene apparatus for enabling a flossing of teeth, the dental hygiene apparatus comprising:

a dispensing member comprising an annular dispensing ring with an aperture for receiving a finger of a user;

an annular dispensing bobbin for retaining dental floss relative to the dispensing member wherein the dispensing bobbin is rotatably retained for substantially concentric rotation relative to the dispensing ring member;

an activating switch operably associated with the means for retaining dental floss relative to the dispensing member dispensing bobbin for selectively enabling a dispensing of dental floss from the dispensing member;

a means for preventing an accumulation of dental floss relative to the dispensing member including during a triggering of the activating switch comprising a means for ensuring unidirectional, dispensing rotation of the dispensing bobbin;

an accumulating member structurally separate from the dispensing member; and

a means for accumulating dental floss relative to the accumulating member;

whereby dental floss can be dispensed from the dispensing member and accumulated by the accumulating member.

5. The dental hygiene apparatus of claim 4 wherein the activating switch enables a dispensing of a predetermined length of dental floss.

6. The dental hygiene apparatus of claim 4 wherein the accumulating member comprises an accumulating ring with an aperture for receiving a finger of a user wherein the means for accumulating dental floss relative to the accumulating member comprises an accumulating bobbin rotatably retained for substantially concentric rotation relative to the accumulating ring.

7. A dental hygiene apparatus for enabling a flossing of teeth, the dental hygiene apparatus comprising:

a dispensing member comprising an annular dispensing ring with an aperture for receiving a finger of a user;

an annular dispensing bobbin for retaining dental floss relative to the dispensing member wherein the dispensing bobbin is rotatably retained for substantially concentric rotation relative to the dispensing ring member;

an accumulating member structurally separate from the dispensing member comprising an accumulating ring with an aperture for receiving a finger of a user; and

an accumulating bobbin for accumulating dental floss relative to the accumulating member wherein the accumulating bobbin is rotatably retained for substantially concentric rotation relative to the accumulating ring member;

whereby dental floss can be dispensed from the dispensing member and accumulated by the

accumulating member.

8. The dental hygiene apparatus of claim 7 further comprising an activating switch operably associated with the means for accumulating dental floss relative to the accumulating member for selectively enabling a retraction of dental floss relative to the accumulating member.

9. A dental hygiene apparatus for enabling a flossing of teeth, the dental hygiene apparatus comprising:

a dispensing member comprising an annular dispensing ring with an aperture for receiving a finger of a user;

an annular dispensing bobbin means for retaining dental floss relative to the dispensing member wherein the dispensing bobbin is rotatably retained for substantially concentric rotation relative to the dispensing ring;

an accumulating member structurally separate from the dispensing member;

a means for accumulating dental floss relative to the accumulating member;

an activating switch operably associated with the means for accumulating dental floss relative to the accumulating member for selectively enabling a retraction of dental floss relative to the accumulating member;

a means for inducing an automatic accumulation of dental floss relative to the accumulating member during a triggering of the activating switch;

whereby dental floss can be dispensed from the dispensing member and accumulated by the

accumulating member.

10. The dental hygiene apparatus of claim 9 further comprising a locking means for preventing a retraction of dental floss from the accumulating member including during a triggering of the activating switch.

11. A dental hygiene apparatus for enabling a flossing of teeth, the dental hygiene apparatus comprising:

a dispensing member;

a means for retaining dental floss relative to the dispensing member;

an accumulating member structurally separate from the dispensing member; and

a means for accumulating dental floss relative to the accumulating member;

wherein the dispensing member and the accumulating member are color coded;

whereby dental floss can be dispensed from the dispensing member and accumulated by the accumulating member.

12. The dental hygiene apparatus of claim 9 wherein the means for retaining dental floss relative to the dispensing member comprises a dispensing bobbin rotatably retained relative to the dispensing ring and wherein the accumulating member comprises an annular accumulating ring with an aperture for receiving a finger of a user and wherein the means for accumulating dental floss relative to the accumulating member comprises an annular accumulating bobbin rotatably retained



relative to the accumulating ring wherein the accumulating bobbin is rotatably retained for substantially concentric rotation relative to the accumulating ring.

13. The dental hygiene apparatus of claim 12 wherein the dispensing bobbin is disposed within a housing of the dispensing ring and wherein the accumulating bobbin is disposed within a housing of the accumulating ring.

14. The dental hygiene apparatus of claim 13 further comprising an aperture in the accumulating ring for enabling a passage of dental floss therethrough and further comprising a scrubber element retained relative to the accumulating ring adjacent to the aperture.

15. The dental hygiene apparatus of claim 13 wherein the means for inducing an automatic accumulation of dental floss relative to the accumulating member during a triggering of the activating switch further comprising an activating means operably associated with the means for accumulating dental floss relative to the accumulating ring comprises a means for selectively enabling a rotation of the accumulating bobbin to yield a retraction of dental floss relative to the accumulating ring.

16. The dental hygiene apparatus of claim 15 wherein the activating means further comprises an activating switch in combination with a means for automatically rotating the accumulating bobbin.

17. The dental hygiene apparatus of claim 16 wherein the activating means further comprises a means for selectively engaging the activating switch with the accumulating bobbin wherein a triggering of the activating switch disengages the activating switch relative to the accumulating bobbin.

18. The dental hygiene apparatus of claim 16 wherein the means for automatically rotating the accumulating bobbin comprises a coil spring and further comprising a means for enabling a winding of the coil spring.

19. The dental hygiene apparatus of claim 7 further comprising a means for varying sizes of the apertures in the dispensing ring and the accumulating ring.

20. The dental hygiene apparatus of claim 19 wherein the means for varying sizes of the apertures in the dispensing ring and the accumulating ring each comprises at least one removable sizing member.

21. The dental hygiene apparatus of claim 19 wherein the means for varying sizes of the apertures in the dispensing ring and the accumulating ring each comprises an insert with an outer annular surface for engaging the aperture in the dispensing ring or the accumulating ring and an inner annular surface defining an aperture for receiving a finger of a user.

22. The dental hygiene apparatus of claim 13 further comprising a means for enabling a removal and replacement of the accumulating bobbin relative to the housing of the accumulating member.

23. The dental hygiene apparatus of claim 9 further comprising a scrubber element retained relative to the accumulating member wherein the scrubber element is removable and replaceable relative to the accumulating member.

24. (withdrawn) The dental hygiene apparatus of claim 1 further comprising a finger shield arrangement comprising a tubular member for receiving a finger of a user in a mating relationship.

25. (withdrawn) The dental hygiene apparatus of claim 24 wherein the finger shield arrangement further comprises a means for constricting the tubular member about the finger of the user.

26. (withdrawn) The dental hygiene apparatus of claim 25 wherein the means for constricting the tubular member about the finger of the user comprises an adhesive tab.

27. (withdrawn) The dental hygiene apparatus of claim 24 wherein the finger shield arrangement further comprises a second tubular member separably coupled to the tubular member.

28. (withdrawn) The dental hygiene apparatus of claim 27 wherein the tubular member and the second tubular member are separably coupled by a first adhesive tab fixed to the tubular member and a second adhesive tab fixed to the second tubular member whereby the first and second adhesive tabs can be separated to enable a separation of the tubular member and the second tubular member.

29-31. (canceled)

32. (withdrawn) The dental hygiene apparatus of claim 31 wherein the floss retaining shell is barrel-shaped with a first end and a second end and wherein the activating trigger is disposed at the first end of the floss retaining shell.

33-34. (canceled)

35. (withdrawn) The dental hygiene apparatus of claim 34 wherein the means for retaining the floss retaining member relative to the hand of the user comprises a ring member coupled to the floss retaining member for receiving a finger of the user.

36. (withdrawn) The dental hygiene apparatus of claim 35 further comprising a means for adjusting a circumference of the ring member.

37. (withdrawn) The dental hygiene apparatus of claim 35 wherein the means for retaining the floss retaining member relative to the hand of the user further comprises a second ring member coupled to the floss retaining member.

38. (withdrawn) The dental hygiene apparatus of claim 34 wherein the means for retaining the floss retaining member relative to the hand of the user comprises an opposed hook arrangement coupled to the floss retaining member.

39. (withdrawn) The dental hygiene apparatus of claim 38 wherein the opposed hook arrangement is coupled to the floss retaining member by a post.

40. (withdrawn) The dental hygiene apparatus of claim 39 wherein the post is extensible and retractable in effective length.

41. (withdrawn) The dental hygiene apparatus of claim 34 wherein the means for retaining the floss retaining member relative to the hand of the user includes a post with a proximal end adjacent to the floss retaining member and a distal end and wherein the means for enabling a transfer of dental floss relative to the floss retaining member includes a means for transferring dental floss relative to the distal end of the post.

42. (withdrawn) The dental hygiene apparatus of claim 41 wherein the means for enabling a

transfer of dental floss relative to the floss retaining member comprises an activating trigger.

43. (withdrawn) The dental hygiene apparatus of claim 42 wherein the activating trigger is disposed adjacent to the distal end of the post.

44. (withdrawn) The dental hygiene apparatus of claim 34 wherein the means for retaining the floss retaining member relative to the hand of the user comprises a band member coupled to the floss retaining member.

45. (withdrawn) The dental hygiene apparatus of claim 44 further comprising a means for adjusting a circumference of the band member.

46-48. (canceled)

49. The dental hygiene apparatus of claim 50 further comprising a means for varying size of the aperture in the ring.

50. A dental hygiene apparatus comprising:

a floss retaining member comprising a first ring with an aperture for receiving a finger of a user and a means for retaining dental floss within the ring, a second ring with an aperture for receiving a finger of a user, and a means for retaining dental floss within the second ring whereby

the floss retaining member comprises floss retaining knuckles; and

a means for enabling a transfer of dental floss relative to the floss retaining member.

51. The dental hygiene apparatus of claim 50 wherein the means for retaining dental floss relative to the floss retaining member comprises a floss retaining bobbin retained relative to the ring and a floss retaining bobbin retained relative to the second ring.

52. The dental hygiene apparatus of claim 50 wherein the means for retaining dental floss relative to the floss retaining member comprises a bobbin that surrounds the apertures in the ring and the second ring.

53. The dental hygiene apparatus of claim 52 wherein the means for enabling a transfer of dental floss relative to the floss retaining member comprises an activating trigger operably associated with the floss retaining member.

54. (withdrawn) The dental hygiene apparatus of claim 29 further comprising a finger shield arrangement comprising a tubular member for receiving a finger of a user in a mating relationship.

55. (withdrawn) The dental hygiene apparatus of claim 54 wherein the finger shield arrangement further comprises a means for constricting the tubular member about the finger of the user.

56. (withdrawn) The dental hygiene apparatus of claim 55 wherein the means for constricting the tubular member about the finger of the user comprises an adhesive tab.

57. (withdrawn) The dental hygiene apparatus of claim 54 wherein the finger shield arrangement further comprises a second tubular member separably coupled to the tubular member.

58. (withdrawn) The dental hygiene apparatus of claim 57 wherein the tubular member and the second tubular member are separably coupled by a first adhesive tab fixed to the tubular member and a second adhesive tab fixed to the second tubular member.

59. The dental hygiene apparatus of claim 50 wherein the means for retaining dental floss relative to the floss retaining member comprises a floss retaining bobbin and wherein the means for enabling a transfer of dental floss relative to the floss retaining member comprises an activating switch in combination with a means for rotating the floss retaining bobbin.

60. The dental hygiene apparatus of claim 59 wherein the activating means further comprises a means for selectively engaging the activating switch with the floss retaining bobbin.

61. The dental hygiene apparatus of claim 59 wherein the means for rotating the floss retaining bobbin comprises a coil spring and further comprising a means for enabling a winding of



the coil spring.

62. The dental hygiene apparatus of claim 50 further comprising a scrubber element retained relative to the floss retaining member wherein the scrubber element is removable and replaceable relative to the floss retaining member.

63. The dental hygiene apparatus of claim 50 wherein the floss retaining shell is disk-shaped and wherein the activating trigger is disposed on the floss retaining shell.

64. The dental hygiene apparatus of claim 4 wherein the means ensuring a unidirectional rotation of the dispensing bobbin comprises a ratchet arrangement.

65. The dental hygiene apparatus of claim 9 wherein the means for inducing an automatic accumulation of dental floss relative to the accumulating member during a triggering of the activating switch comprises a means for automatically rotating the accumulating bobbin.

66. The dental hygiene apparatus of claim 65 wherein the means for automatically rotating the accumulating bobbin comprises a coil spring and further comprising a means for enabling a winding of the coil spring.

67. A dental hygiene apparatus for enabling a flossing of teeth, the dental hygiene apparatus

comprising:

a dispensing member comprising an annular dispensing ring with an aperture for receiving a finger of a user;

a dispensing bobbin for retaining dental floss relative to the dispensing member wherein the dispensing bobbin is rotatably retained for substantially concentric rotation relative to the dispensing member;

an accumulating member structurally separate from the dispensing member wherein the accumulating member comprises an annular accumulating ring with an aperture for receiving a finger of a user;

an accumulating bobbin for accumulating dental floss relative to the accumulating member wherein the accumulating bobbin is rotatably retained for substantially concentric rotation relative to the accumulating member;

wherein the dispensing bobbin is enclosed within a housing of the dispensing member and wherein the accumulating bobbin is enclosed within a housing of the accumulating member;

whereby dental floss can be dispensed from the dispensing member and accumulated by the accumulating member.

68. The dental hygiene apparatus of claim 67 further comprising an activating switch operably associated with the accumulating bobbin for selectively enabling a retraction of dental floss relative to the accumulating member and a means for inducing an automatic rotation of the bobbin during a triggering of the activating switch.--

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*(IX) Evidence appendix.*

None.

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*(x) Related proceedings appendix.*

None.

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Respectfully Submitted,

/Thomas P. O'Connell Reg. No. 37,997/

Thomas P. O'CONNELL, Esq.  
*Attorney for Applicant*  
Customer No. 20738  
(781) 643-1845

**Certificate of Transmission**

I hereby certify that this correspondence is being to the United States Patent and Trademark Office by use of the EFS-Web on this the 9<sup>th</sup> of June, 2008.

/Thomas P. O'Connell Reg. No. 37,997/  
Thomas P. O'Connell, Esq.

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